nia, was interpreted as fulfilling the original description<sup>1</sup> of the species with regard to the glabrity of the dorsal surface of the foliage, whereas the variety with the dorsal leaf-surface predominantly more or less pubescent, common to the northeastern States and adjacent Canada and to a less extent generally westward, was designated as coinciding with the requirements of A. de Candolle's var. *incanum*. This interpretation was the one previously made by the only revisors<sup>2</sup> of the genus, since the time of de Candolle, who had considered the eastern and the western plants as representing distinct varieties.

However, in spite of his diagnosis of the dorsal leaf-surface of the species as glabrous, Linnaeus stated that his plants had their habitat "in Virginia, Canada." Furthermore, according to Prof. M. L. Fernald, the specimen from the Hortus Cliffortianus preserved in the herbarium of the British Museum (Natural History) actually has the dorsal leaf-surface glabrous, and upon the foliage of a specimen of doubtful origin incorporated in the herbarium of Linnaeus at the Linnean Society of London the trichomes are perceptible only with the aid of a hand-lens. As a matter of fact "glabrous" was a relative term of not too great exactitude in the time of Linnaeus, and under the circumstances it is easy to see how the commonly pubescent eastern variety was so described.

In the light of the foregoing considerations it is undoubtedly necessary to restore the typical designation to the eastern plants, in which case var. glabrum Macoun, Cat. Can. Pl. 2: 317. 1884 is the correct name of the western variety.—R. E. Woodson, Jr., Missouri Botanical Garden.

## A FEW NOTEWORTHY PLANTS FROM SOUTHERN VERMONT

## RICHARD J. EATON AND LUDLOW GRISCOM

On September 4 and 5, 1931, the writers made two botanical trips, primarily for reconnaissance, to the valleys of the Connecticut River and its tributaries in southern Vermont and New Hampshire. No attempt was made to explore any one locality systematically or to collect a representative series of plants. Only such specimens were taken as appeared unusual or of personal interest. No mention

<sup>&</sup>lt;sup>1</sup> L. Sp. Pl. ed. 1. 213. 1753.

<sup>&</sup>lt;sup>2</sup> cf. Beguinot, A., & N. Belosersky R. Accad. Lincei Atti, Mem. Cl. Sci. Fis. V. 9: 670-671. 1913.

will be made at this time of plants collected on the New Hampshire side of the river.

With West Dover as a base, the routes followed included the valley of West River at Dummerston, and West Putney, and the valley of the Connecticut River at Westminster, Bellows Falls, Charlestown (N. H.), Claremont (N. H.), Ascutney and Weathersfield. The following briefly annotated list of the more noteworthy plants found is arranged for convenience in Manual order. An asterisk denotes a plant which apparently has not previously been reported from Vermont. Unless otherwise noted, specimens have been retained in the possession of the writers.

\*Panicum virgatum L. var. spissum Linder. Meadow, Springfield, 4 September 1931. Plant forming a dense clump or stool.

In technical characters it is clearly this variety, but the panicle is open and lax as in typical *P. virgatum*, which incidentally has been reported only from three or four stations in Vermont.

Muhlenbergia tenuiflora (Willd.) B. S. P. Alluvial bank of West River, Dummerston, 4 September 1931.

No published account of the occurrence of this species in Vermont has been found. However, Mr. Dana S. Carpenter writes that it is "occasional" in the State. There are two specimens in the New England Botanical Club Herbarium as follows: West Haven, Rutland Co., G. L. Kirk, 17 August 1913; Brattleboro, Windham Co., L. A. Wheeler, 19 August 1915.

\*Eragrostis Frankii (F. M. & L.) Steud. Sandy bank of Connecticut River, Westminster, 4 September 1931.

A single vigorous plant was found of which a small portion has been deposited in the Herbarium of the New England Botanical Club.

Bromus ciliatus L. var. intonsus Fernald. Alluvial bank of West River, Dummerston, 5 September 1931.

This specimen differs from the type in possessing lemma and palea characters assigned to B. Dudleyi Fernald. See Rhodora 32: 63-68. Typical var. intonsus is the common representative of the group in this region.

Elymus virginicus L., forma monanthos, n. f. spiculis omnino unifloris, rachilla nuda 0.5 mm. longa post paleam prominente; glumis parte tertia superiore margine manifeste scabris.

Spikelets single-flowered throughout, with naked, short (.5 mm.) rachilla-stumps projecting behind the paleas; glumes, exclusive of their scabrous awns, distinctly scabrous on margins along outer

third of their length.—Edge of meadow, Springfield, 4 September 1931. Type placed in Herbarium of New England Botanical Club.

Further collections and study of herbarium material may require elevation of this form to varietal rank.

CYPERUS ARISTATUS Rottb. Sandy shore of Connecticut River, Ascutney, 4 September 1931. Frequent.

Sanicula trifoliata Bicknell. Rich pocket on rocky wooded hillside, Dummerston, 5 September 1931. Not common.

Duplicate specimen placed in Herbarium of New England Botanical Club.

Gentiana Andrewsii Griseb. Edge of thicket, West Putney, at altitude of 1200 feet, 4 September 1931.

A very scarce plant on the uplands of southern Vermont.

\*Solidago bicolor L. X S. nemoralis Ait. Dry upland field, West Putney, 4 September 1931.

An unusual hybrid, with white rays and yellow disk flowers. This plant shows the small axillary leafy fascicles of S. nemoralis and the regular thyrsoid inflorescence of S. bicolor. In pubescence, and leaf outline, the plant is intermediate between the two. The assumed parents were abundant and in close proximity.

S. RUGOSA Mill. Gravel railroad embankment, Westminster, 4 September 1931. A gigantic specimen 2.5 + m. high, stem about 1 cm. thick at base. No specimen preserved.

ASTER DIVARICATUS L. var. tenebrosus (Burgess), comb. nov. A. tenebrosus Burgess in Britt. & Br., Ill. Fl. iii. 357, fig. 3736 (1898). Rich deciduous woods, West Dover, at altitude 1900 feet, 4 September 1931.

This specimen is conspicuously separable from typical A. divaricatus by its glabrate, dark green, long-acuminate leaves with relatively coarse teeth, and by its relatively firm broad obtuse bracts, green or rose-tipped, regularly imbricated to form a broad nearly hemispherical involucre, the innermost series not elongated or noticeably different in texture from the outer series.

In proposing this new combination, the authors consider the plant unworthy of specific recognition. On the other hand, they are strongly of the opinion that it deserves varietal rank as a well-marked extreme of the polymorphic A. divaricatus group, commonly replacing the species in the higher rich wooded hillsides of western New England, New York, and south to Virginia. Wiegand and Eames in their Flora of Cayuga Lake Basin state that this is the prevailing form of the species in central New York. When well developed var. tene-

brosus is recognizable at a glance in the field, but passes freely into typical A. divaricatus.

\*A. GLOMERATUS Bernh. Rich deciduous woods, valley of West River, Dummerston, 4 September 1931. Growing with A. divaricatus and A. Schreberi.

An indefinite and unsatisfactory species. Very few specimens are in the Gray Herbarium, which, like the present one, possess all the characters claimed for the species. Apparently it has never been collected except where the other two species occur together commonly.

\*A. FOLIACEUS Lindl. var. SUBLINEARIS Griscom & Eaton. Alluvial bank of Connecticut River, Weathersfield, 4 September 1931, Eaton & Griscom, no. 14754 (TYPE); Weathersfield, 4 September 1931, Eaton & Griscom. Bank of West River, Dummerston, 5 September 1931, Eaton & Griscom, no. 14758.

These specimens are cited here because they demonstrate the range of variation in leaf width and size of heads which may be expected in this variety. For a discussion of the New England representatives of A. foliaceus, see Griscom and Eaton in Rhodora (34: 13). For a brief description of the species and several varieties see Fernald: Rhodora, 17: 13.

## NOTES FROM THE AMHERST COLLEGE HERBARIUM ALFRED S. GOODALE

In the List of Herbaria of New England compiled in 1901 by the late Mary A. Day, the Amherst College Herbarium was described as containing "about 12,000 species of which 2,000 sheets represent European species and the remaining 10,000 American; the latter exhibiting chiefly the flowering plants from that part of the United States east of the Mississippi River." (Rhod. 3: 68) During the thirty years elapsing since the publication of the above statement the size of this collection has increased to more than five times that previously recorded, and has so magnified its scope that it seems wise to give an account of its history and present status.

Apparently its nucleus was assembled by President Edward Hitch-cock whose interest in botany was secondary only to his devotion to palaeontology. He was an enthusiastic collector and a critical observer of the plants occurring in Amherst and its nearby towns. To him is attributed the publication of the first list of plants of this vicinity.